

CANOPYTRACK POLLINATION READINESS MONITOR



OVERVIEW

While palm oil production continues to be a vocal issue amongst many environmentalist groups, market demand and the critical role oil palm plantations and small-holder tracts play in local economies necessitate continual growth in production. To help improve yields without promoting unnecessary expansion, many progressive producers have begun utilizing higher quality seeds genetically pre-disposed to promote greater yield per hectare. Ensuring that genetic purity is the responsibility of the seed breeder and requires careful attention to the pollination process through manual control.

Current methods of controlled pollination require a visual inspection to determine suitability for pollination. This typically requires a worker climbing a tree or ladder to inspect the inflorescence. This is costly, dangerous and inefficient. With very short pollination windows of only 36-48 hours (depending on species), it is easy to miss these windows of opportunity for manual pollination.

The CanopyTrack system monitors the state of the inflorescence remotely, notifying the farm manager when each monitored tree is ready for pollination. More accurate than the subjective nature of visual inspection, the CanopyTrack system greatly decreases the chance of missed windows and allows a manager to be more efficient in the allocation of labor.

Measurements are taken every two hours within high quality pollination bags and alerts are sent through our intuitive cloud-based platform as well as through SMS text or email to notify the appropriate person that a tree has entered its pollination window. Utilizing powerful RPMA communication technology, CanopyTrack delivers where other systems simply can't.



The future of the palm industry will grow from the investments and management decisions of today.



BENEFITS

The CanopyTrack pollination readiness monitor allows plantation managers and palm breeders to confidently execute plans for controlled pollination operations while mitigating risk of loss from missed pollination windows, reducing labor costs and worker injury. Automated alerts for pollination readiness means breeders can ensure genetic purity in seeds to command the highest value and improve crop yields.

- **Monitoring**

CanopyTrack uses a non-contact sensing solution to monitor pollination readiness through a non-invasive method safe for the plant

- **Communication**

The system operates utilizing the 2.4GHz frequency RPMA network available globally

- **Endurance**

The system can operate for up to 12 months on simple AA alkaline battery power

- **Environmental**

The system uses lead-free components & is fully RoHS compliant

FACTS



Pollination control during oil palm breeding greatly improves yield and quality



Communication is often a major limiting factor in rural areas; RPMA solves that



99% of oil palm are in areas of limited communication infrastructure



There is significant public value in investing in efforts at sustainable production